



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,993	02/07/2001	Mitsuo Nimura	CANO:019	2390

7590 10/15/2004
ROSSI & ASSOCIATES
P.O. Box 826
Ashburn, VA 20146-0826

EXAMINER

PHAM, THIERRY L

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,993

Applicant(s)

NIMURA ET AL.

Examiner

Thierry L Pham

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al (U.S. 5159546).

Regarding claim 1, Inoue discloses an image forming apparatus (fig. 2a) comprising:

- (1) reading means (scanner, fig. 1) for reading images recorded on originals;
- (2) image forming means (printer engine, fig. 1) for forming images on blank sheets based on the read images;
- (3) stacking means (paper inserter trays, fig. 2 and fig. 30, col. 7, lines 5-15 and col. 23, lines 44-67) for stacking a plurality of insert sheets which are fed in a manner bypassing image formation by said image forming means and inserted between said sheets (interleave sheets, fig. 32d) having images formed thereon by said image forming means;
- (4) inserter means (interleave inserter functions, fig. 32d, fig. 34a-b, col. 41, lines 45-65) for reading out the stacked insert sheets and inserting same between the sheets having images formed thereon;
- (4) designating means (interleave inserter functions, fig. 32d, figs. 34a-b) for designating at least one position in said sheets having images formed thereon for insertion of at least one of the insert sheets by said inserter means;

Art Unit: 2624

(5) detecting means (paper detector means for detecting presence/absence of media in paper trays, col. 21, lines 60-67 and col. 22, lines 48-60) for detecting an insert sheet to be inserted first when a plurality of positions have been designated by said designating means; and

(6) discharging means (discharging papers from inserter trays, col. 21, lines 60-67 to col. 22, lines 1-60 and col. 23, lines 45-67 and col. 40-54) operable when said detecting means detects that the insert sheet read out by said inserter means is not the insert sheet to be inserted first, for discharging insert sheets from said stacking means until the insert sheet to be inserted first is detected (insertion function is halted until insertion paper is detected by paper detector, col. 21, lines 60-67 to col. 22, lines 1-60 and col. 23, lines 45-67 and col. 40-54).

Regarding claim 2, Inoue further discloses an image forming apparatus according to claim 1, wherein said stacking means comprises a plurality of trays (inserter trays, col. 21, lines 60-67 and col. 40, lines 60-67+, fig. 30) for stacking said plurality of insert sheets in a divided manner, the image forming apparatus further comprising selecting means (control panel, fig. 34-35) capable of selecting between two types of stacking modes consisting of a first stacking mode in which a same type of insert sheets (i.e., manual insertion trays, fig. 32d) are stacked on each of said plurality of trays and a second stacking mode in which plural types of insert sheets (insertion sheets can be selected from any plurality of inserter trays, col. 40, lines 60-67 to col. 41, lines 1-67 and fig. 32k) are stacked in order in which they are inserted on each of said plurality of trays, and wherein said discharging means discharges insert sheets from said stacking means when said second stacking mode is selected by said selecting means.

Regarding claim 3, Inoue further discloses an image forming apparatus according to claim 1, further comprising post-processing means (i.e. output bins, fig. 30 and 32d) for stacking said sheets having images formed thereon by said image forming means in a fashion mixed with insert sheets inserted by said inserter means, and for carrying out post-processing on the mixedly stacked sheets.

Regarding claim 4, Inoue further discloses an image forming apparatus according to claim 3, wherein said discharging means discharges said insert sheets to a location other (output bins sorter, fig. 30 and 32m) than said post-processing means.

Regarding claim 5, Inoue further discloses an image forming apparatus according to claim 1, comprising a conveyance path (col. 19, lines 8-20) for insert sheets, and wherein said detecting means is provided on said conveyance path for insert sheets.

Regarding claim 6, Inoue further discloses an image forming apparatus comprising:

- (1) reading means (scanner, fig. 1) for reading images recorded on originals;
- (2) image forming means (printer engine, fig. 1) for forming images on blank sheets based on the read images;
- (3) stacking means (paper inserter trays, fig. 2 and fig. 30, col. 7, lines 5-15 and col. 23, lines 44-67) for stacking a plurality of insert sheets which are fed in a manner bypassing image formation by said image forming means and inserted between the sheets having images formed thereon by said image forming means;
- (4) inserter means (interleave inserter functions, fig. 32d, fig. 34a-b, col. 41, lines 45-65) for reading out the stacked insert sheets and inserting same between said sheets having images formed thereon;
- (5) designating means (interleave inserter functions, fig. 32d, figs. 34a-b) for designating at least one position in said sheets having images formed thereon for insertion of at least one of the insert sheets by said inserter means;
- (6) detecting means (paper detector means for detecting presence/absence of media in paper trays, col. 21, lines 60-67 and col. 22, lines 48-60) for detecting an insert sheet to be inserted first when a plurality of positions have been designated by said designating means;
- (7) interrupting means (interrupt, fig. 26) for interrupting a sheet inserting operation of said inserter means when at least one of the insert sheets has jammed while being inserted by said inserter means; and
- (8) discharging means operable when said detecting means detects that the insert sheet read out by said inserter means is not the insert sheet to be inserted first after the apparatus has recovered

Art Unit: 2624

from the interruption by removing the at least one jammed insert sheet (restart printing/discharging after jam recovery, col. 14, lines 13-35), for discharging insert sheets from said stacking means until the insert sheet to be inserted first is detected (insertion function is halted until insertion paper is detected by paper detector, col. 21, lines 60-67 to col. 22, lines 1-60 and col. 23, lines 45-67 and col. 40-54), and for further discharging insert sheets from said stacking means up to an insert sheet immediately preceding a same type of sheet (col. 14, lines 13-35) as the at least one jammed insert sheet.

Regarding claims 7-10, please see claims 2-5 above for more details.

Regarding claims 11-13, 24-26 recite limitations that are similar and in the same scope of invention as to those in claims 1-5 above and combination thereof; therefore, claims 11-13 are rejected for the same rejection rationale/basis as described in claims 1-5.

Regarding claims 14-18: Claims 14-18 are the method claims corresponding to the apparatus claims 1-5 (respectively). The method claims are inherent and included by the operation of the apparatus claims. Please see claims rejection basis/rationale as described in claims 1-5 above.

Regarding claims 19-23: Claims 19-23 are the method claims corresponding to the apparatus claims 6-10 (respectively). The method claims are inherent and included by the operation of the apparatus claims. Please see claims rejection basis/rationale as described in claims 6-10 above.

Regarding claims 27-39 correspond to claims 1-13 except computer readable memory medium for storing program is claimed rather than printing system or data output apparatus. All computers/printers have some type of computer readable memory medium (RAM, fig. 27) for storing computer programs, hence claims 27-39 would be rejected using the same rationale as in claims 1-13.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) U.S. 5124731 to Knodt et al, discloses an image forming apparatus with insertion function for inserting cover sheets with plurality of different types of paper media.

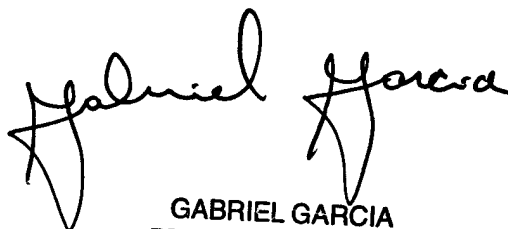
(2) U.S. 6765685 Yu, discloses an method for inserting interleave paper with different types of print media.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham



GABRIEL GARCIA
PRIMARY EXAMINER